



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,619	02/10/2004	Kevin P. Bishop	D5490	1571
30409	7590	04/10/2006	EXAMINER	
INTERNATIONAL ENGINE INTELLECTUAL PROPERTY COMPANY 4201 WINFIELD ROAD P.O. BOX 1488 WARRENVILLE, IL 60555			HOANG, JOHNNY H	
			ART UNIT	PAPER NUMBER
			3747	

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/775,619	BISHOP ET AL.
	Examiner	Art Unit
	Johnny H. Hoang	3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 January 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-4,6-8,10-12,14-16,18-20 and 22-41 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 2-4,6-8,10-12,14-16,18-20,22-24 and 33-41 is/are allowed.
- 6) Claim(s) 25,27 and 30 is/are rejected.
- 7) Claim(s) 26,28,29,31 and 32 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 August 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3747

Response to Amendment

1. The allowed claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-41 in the Notice of Allowance filed on 03/01/2006 have been withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 25, 27, and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Joos et al (US 6,968,829 B2).

Regarding claims 25, 27, and 30, the reference of Joos et al discloses an engine operates with direct fuel injection having multiple cylinders (12) into which a fueling system injects fuel during engine cycles, the method comprising: operating a control/regulating device (34) in a manner that sets a fuel flow rate in units measured in mass of fuel per unit of time (see Fig. 1, and claims 1, and 7). The control/regulating device is same function as governor that sets a mass or quantity of fuel that is to be injected per unit of time.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 25, 27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer (US 6,425,370 B1) in view of Gladden (US 4,403,473).

The reference of Kramer discloses the method of loading governing a compression ignition engine which includes the governor (113) processes the inputs to develop output data representing governed mass fuel data MFGOV representing engine fueling (col. 5, lines 24-45), except the units measured in mass of fuel per unit of time.

The reference of Gladden discloses which includes a fuel injection pump (12), which meter and pump fuel to the respective engine combustion chambers in an amount per unit time which are controlled by a conventional governor (18) (col. 3, lines 60-68).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify and/or provide the method of Kramer with fuel flow rate in units measured in mass of fuel per unit of time, as taught by Gladden in order to perform more details for the compression ignition internal combustion engine.

Allowable Subject Matter

6. Claims 2-4, 6-8, 10-12, 14-16, 18-20, 22-24, and 33-41 are allowed.
7. Claims 26, 28, 29, 31, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed August 12, 2005 have been fully considered but are moot in view of the new ground(s) of rejection. ***Claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-41 are pending.***
9. The combination of Kramer and Gladden is the same as broadly claimed "governor that sets a fuel flow rate".

Art Unit: 3747

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny H. Hoang whose telephone number is (571) 272-4843. The examiner can normally be reached on Monday - Thursday (7:00Am-5: 30Pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (571) 272-4856.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHH
March 29, 2006

Johnny H. Hoang
Examiner
Art Unit 3747

Willis R. Wolfe, Jr.
Willis R. Wolfe
Primary Examiner
Art Unit 3747